Dupuytren's Contracture in a Young Man following Injury (shown before and after Operation).¹

By Paul Bernard Roth, F.R.C.S.

S. S., AGED 31, was wounded in January, 1916, near Armentières, with a rifle grenade splinter in the ring finger of the left hand. There was a small flesh wound situated, as can be seen by the scar on the palmar aspect of the ring finger, at the junction of the middle and distal phalanges. After a month it was completely healed, though there seems to have been some suppuration, and patient thought nothing more about it and returned to duty. He was treated the whole time at an "advanced dressing station."

In December, 1916, patient "began to feel something tight pulling down his finger, and it became bent towards the palm. This got worse gradually and when shown on November 4, 1919, the ring finger was flexed 60° at its metacarpo-phalangeal joint, the interphalangeal joint not being affected. A very prominent ridge, due to the contracted palmar fascia, was seen in the palm, leading up to the base of the ring finger: to this ridge the skin was adherent, as shown by puckered dimples and transverse ridges at several places.

Note.—The little fingers of both hands had been contracted ever since the patient could remember, but had never given any trouble.

REMARKS.

I suggest that the points of interest about this case are: (1) The manner of causation; (2) the youth of the patient; and (3) the treatment to be adopted.

- (1) There is no doubt this is a true case of Dupuytren's contracture. The cause of the condition is not definitely known: but in this case it is probable that organisms of suppuration have gained entry to the prolongation of the fascia on the ring finger, spread down it to the palm and have set up a septic fibrositis in it.
- (2) The youth of the patient—he was aged 28 when the contraction commenced—is certainly worthy of special note. In all descriptions of

¹ This case was shown to the Members of the Sub-section at their Meeting on December 2, 1919, before operation. See *Proceedings*, 1919-20, xiii (Sect. Surg., Sub.-sect. Orthop.), p. 113.

the condition the writers have insisted on the advanced age of the patients. Thus Noble Smith recorded seventy cases of this condition, all of which occurred in elderly people (quoted by Bradford and Lovett).

(3) In the treatment of these cases I prefer to adopt Adams's operation performed in the manner he described, and followed by bandaging the finger in complete extension to a straight splint.

Operation was performed on November 7. Under chloroform anæsthesia the skin of the palm was punctured with a fine tenotome in eight or nine places just to one side of prominent parts of the tense fascia. At each puncture the tenotome was introduced with the flat of its blade almost parallel with the surface of the palm and it was gently insinuated between the skin above and the prominent band of fascia beneath. The blade was then rotated 90° until its edge was at right-angles to the fascia and the fascia was then divided by cutting down into the palm. Traction was simultaneously made on the flexed finger, and as each part was divided, the finger gradually straightened until it lay completely extended. A straight splint was applied and kept on for a week: after this it was removed during the day, but applied for a further two weeks at night.

The operation has resulted in a complete cure, with full power of extension and flexion.

The PRESIDENT: Many of us saw this case a few months ago and we must congratulate Mr. Roth on the treatment. Possibly, as the case may be one due to sepsis, the prognosis may be better and relapse less likely, for the septic element having subsided there cannot be the tendency to progress that is present in a true Dupuytren's contraction.